

Ontario Convention.

MORLEY PETTIT.

Use of Bait-Sections.

G. C. GREINER.

AMERICAN BEE JOURNAL

MASSACHUSETTS
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COLLEGE

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CHICAGO, ILL., MARCH 31, 1904.

No. 13.

WEEKLY

When the Bees are on the Wing.

By C. H. BENSON.

Oh! the dreary, lagging Winter, when the earth is robed in snow,
With the mercury at zero—or an inch or two below ;
When the bees are in the cellar, and the birds have Southward flown,
And the wind sighs round the gables with a broken-hearted moan ;
How we long for indications of the coming balmy spring,
When the pussy-willows blossom, and the bees are on the wing.

But in May the heart grows lighter, when the orchards are in bloom,
And we watch the busy workers as they swiftly go and come ;
And the birds back from the Southland cheer us with their gladsome song,
As we spread the brood a little—help the colonies grow strong ;
Then the world is full of gladness, and the heart can't help but sing.
The honey season's almost here—the bees are on the wing !

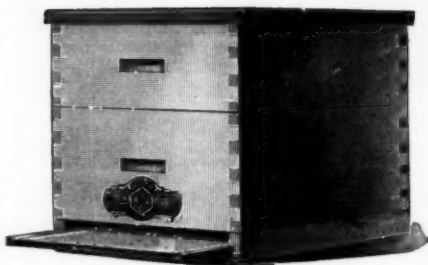
Then comes June—Queen-Month of summer—when with joy the bee-man sees
That the hives are running over with the busy, working bees ;
And we scarce can eat our dinner without hearing an alarm,
And we leave the table hungry to go out and hive a swarm ;
And we hustle on the supers, and we do not mind the sting,
For the honey's in the clover, and the bees are on the wing.

In the New Earth that is promised, when our Lord again shall come,
And our Father with His saved ones on that Earth shall make His home ;
When the glory of His presence shall make glad each faithful heart,
And of all the New Earth's bounties each shall freely take his part ;
When we feast on milk and honey, in the Palace of the King—
There I hope to hear the humming of the bees upon the wing.

Barry Co., Mich.

THE VOICE OF THE PEOPLE

DANZENBAKER'S HIVE.



MORE HONEY. BETTER PRICES.

WE HAVE TOLD YOU SOME THINGS

—ABOUT THE—

DANZENBAKER HIVE FOR COMB HONEY.

NOW SEE WHAT OTHERS SAY.

**MORE
HONEY.**

**MORE
HONEY
AND
BETTER
PRICES.**

UNION BRIDGE, MD. Feb. 9, 1904.

The A. I. Root Co., Medina, O.

Gentlemen:—I saw in a recent issue of your paper that you have a department called "Reports Encouraging." I shall send you my report.

I use the Danzenbaker hiv and will give you report of the same, as the few dovetailed hives that I use do not compare at all with the Danzenbaker. One colony gave me over one hundred pounds No. 1 white honey and the rest averaged about sixty, with an increase by natural swarming of one hundred per cent. A friend of mine who uses all sorts and kinds of hives in his apiary succeeded in making scarcely enough honey to pay for the foundation used in the sections. This was about two miles from my apiary. Long live the Danzenbaker hive! It is just the thing for this locality.

Yours truly,

J. B. HOLLOPETER.

MALLET CREEK, O., Sept. 25, 1902.

I have now 250 colonies of bees, of which 170 are in the Danzenbaker hives, and shall have all my bees in Danzenbaker hives next spring. During this past poor season, 30 or 40 of the colonies in the Danzenbaker hives gave over 100 lbs. surplus. On the average I get more than double the amount of honey from these colonies that I do from those in the old chaff hives. With a 7-inch telescopic cover, the Danzenbaker hive winters the bees better than the chaff hives.

VERNON BURT.

I have used both square and tall sections in all my apiaries five years, and know from practical experience that it will pay to discard the $\frac{4}{8}$ sections, and use only $\frac{4}{5}$ sections, and the Danzenbaker hive with the fence separator. They have made enough more this season in the same yard to pay for the hives. I have made more money this season per hive than I have any previous year in my 15 years of bee-keeping. Fifteen of my strongest Danzenbaker hives made me a ton of honey. When it comes to sales I get more for the $\frac{4}{5}$ sections, and have no work in cleaning them. I ship them as I take them from the super. This is not the case with the $\frac{4}{8}$ section. I make honey to sell, and anything that sells the best, and for the most money, is what I want out of the bee-business.

S. D. MATTHEWS.

In Gleanings, p. 931, Dec. 15, 1899.

MOUNTAIN VIEW, N. J., Oct. 6, 1897.

I have run my hives largely with the Danzenbaker sections this year, and shall increase my facilities for the Danzenbaker output next year. I sold all my fancy clover in Danzenbaker sections, glazed, to two fancy grocers in New York, at 20 cts. a section; were retailed at 25 cts. each. My $\frac{4}{8}$ sections, unglazed, sold to grocers at 12 $\frac{1}{2}$ to 13 cts., retailing 16 cts. I furnished cartons with the $\frac{4}{8}$, which cost nearly as much as glass.

B. F. ODERDONK.

**BETTER
PRICES
FOR
DANZY.
HONEY.**

**A RECENT
ORDER.**

**64-PAGE
BOOK.**

**SPECIAL
NOTICE.**

ROCK VALLEY, N. Y., Feb. 22, 1901.

My bees gathered no surplus after July 1. I had only 1200 lbs., but I obtained a fancy price—15 $\frac{1}{4}$ for "Fancy" and No. 1 white, and 14 $\frac{1}{2}$ for No. 2 here at my station for all the Danzenbaker $\frac{4}{5}$ plain sections, used on your hives, while I got only 14 and 13 cts. per lb. for the $\frac{4}{8}$ square sections, and I consider that much difference is worth looking after—don't you? The Danzenbaker hives doubled up, two brood-chambers, are in fine condition, even better than my double-walled hives. I intend to build a bee-cellar and work off my double-walled hives as fast as I can, and get the Danzenbaker hives. Very truly yours,

J. L. HAIGHT.

It is not claimed that so large an advance in price as is mentioned above can usually be obtained for honey in Danzenbaker sections, but because it is more uniformly fancy grade, and of general better appearance it commands the highest prices and a more ready sale in a dull market than ordinary honey.

INDIANAPOLIS, IND., Feb. 3, 1904.

The A. I. Root Co., Medina, O.

Dear Sirs:— Please ship to me as soon as convenient: 500 Danzy. AD64M hives.

Yours,

WALTER S. POWDER.

(This is in addition to all other orders.)

Mr. Danzenbaker's little book, "Facts About Bees," containing 70 pages, giving full particulars regarding this hive and system, is indeed full of facts. If one follows the directions clear through, he is sure to produce a strictly first-class article of comb honey, providing of course there is any honey to be had. This unique little book will be sent free to all who apply for it.

Bee-keepers are raising honey for the money there is in it, or for the pleasure they get out of it. It is conceded by all who have tried this system that it is highly profitable. Reading over letters from the users of this hive who tell of securing large crops of honey almost free from propolis makes us think that the bee-keeper who is in the business for pleasure would be highly gratified with the hive also. What is more satisfying than to take off well-filled supers of snow-white sections free from the propolis that is so often found on sections in cases that are poorly constructed and adapted for the production of a fancy article?

The great popularity of the Danzenbaker hive has brought the shallow brood-frame and the tall plain sections into prominence. It must be remembered that no other hive contains the essential features of the Danzenbaker. The success of this system depends on having everything just right, so you should place your order for the Danzenbaker hive with our main office, or any of our branches or regular agents.

THE A. I. ROOT COMPANY,

BRANCHES:

Main Office and Works, Medina, Ohio, U. S. A.

BRANCHES:

CHICAGO, ILL., 144 East Erie St.
MECHANIC FALLS, ME.

SYRACUSE, N. Y.

PHILADELPHIA, PA., 10 Vine St.

ST. PAUL, MINN., 1024 Miss. St.

HAVANA, CUBA, San Ignacio.

San Antonio, Tex., 438 W. Houston.

Washington, D. C., 1200 Md. Av., S.W.

(See list of Jobbing Agents in American Bee Journal, Jan. 7, page 2.)

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1861

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IN AMERICA

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GEORGE W. YORK, Editor.

CHICAGO, ILL., MARCH 31, 1904.

Vol. XLIV—No. 13.

Editorial Comments

Care in Foul-Brood Regions.

One of the results of the New York State investigation gives material for thinking over, and helps to explain some things. A sample of *healthy brood*, taken in a vicinity of bees affected with black brood, showed the presence of *Bacillus alvei* in considerable numbers. For practical purposes it matters little whether the disease in that region was black brood or foul brood, if *Bacillus alvei* is the culprit in both cases. The point of emphasis is that *Bacillus alvei* may be present without being detected by any ordinary means. How can that be?

Scientists tell us that formic acid in the form of vapor is constantly exhaling from combs out of which young bees have lately emerged, temperature and robustness of the colony favoring such development. Also, that where formic acid is present in sufficient quantity the spores of *Bacillus alvei* can not germinate. This helps to account for the fresh breaking out of disease at times where it has been supposed to be eradicated, and for the belief of some that carelessness, chilled brood, etc., may produce the disease. It also accounts for the apparent disappearance of the disease when a colony becomes strong and active in the harvest, only to break out later on.

The moral of all this is that in all cases, and especially in regions where disease is present, it is of first importance to keep colonies strong and in good condition at all times.

The National and Its Increasing Work.

From a letter received recently from General Manager France, it seems that the National Bee-Keepers' Association is to be kept very busy with various kinds of trouble for some time. Among the cases on hand and in prospect are the following:

A complaint from Colorado about bees causing pear-blight.

In New York, a suit before a Justice of the Peace as a result of a little neighborly spite-work.

In Canada, trouble caused by bees soiling clothes on a neighbor's wash-line.

In Minnesota, bees soiling clothes and stinging neighbors.

In California, 60 colonies of bees burned by a neighbor, who then refused to pay the damages to the bee-keeper; honey stolen, and the guilty parties and the honey found—prosecution to follow; and a case of honey adulteration.

The New York horse and bee case was decided in favor of the bee-keeper, the owner of the horse to pay the witnesses and court costs. The attorney's fees paid by the National in this case are \$55.

If troubles continue to multiply, it will be necessary for the National to have a general manager who can devote most of his time to its interests. It will be necessary to pay a larger salary for such services than at present. The fact is, that no one can afford to do the work of the general managership on the small salary that is paid at present. The Association could well afford to pay the right man a good salary for devoting practically his whole time to the work. Of course it would be necessary to develop a number of lines that are not now followed up at all. In order to do all that might be done through the Association for the benefit of the bee-keepers, it would take con-

siderable money, but we believe that after bee-keepers began to see the good resulting from the work done by the Association, they would be glad to pay all it would cost.

Perhaps some day the Association will be strong enough, and wise enough in its management, to take hold of the many great subjects of vital interest to bee-keepers, and push them to a successful end. Much excellent work has already been done, but there is a growing demand for a larger service in the interest of honey-producers. The National Association should take the lead in this work. We believe it will do so, in due time.

Artificial or Corn-Juice "Honey."

Several of our subscribers have lately sent to us copies of the following taken from such papers as the Philadelphia Public Ledger, the New York World, etc.:

John D. Rockefeller now makes artificial honey with as much enthusiasm as he formerly pumped petroleum out of the ground years ago. He puts corn into water and boils it with a little sulphuric acid. Then he puts in some lime to neutralize the acid. This forms a precipitate of sulphate of lime. He separates the sulphate from the corn-juice by running the mixture through a filter press. The result is a crude glucose, which so resembles real honey in flavor and color that it takes an expert to distinguish it from the genuine product.

There is one objection to the glucose honey. It retains, no matter how much it is refined, a certain trace of the sulphuric acid. Commission men say they can taste the acid. Chemists declare that the acid rots the teeth. In another generation or two, from this cause alone, they contend, there will be hardly a child with sound teeth.

Mr. Rockefeller is doing his best to get rid of the sulphuric acid. He has offered, it is said, \$500,000 to any chemist who can produce glucose from corn as cheaply as by his present process without the use of sulphuric acid, or, at least, acid in the corn-juice.

The crude glucose Mr. Rockefeller dilutes with real honey, puts up in nice-looking glass jars with fancy labels, and sends all over the world. Grocers sell it to the unsuspecting public, and little children eat it with delight.

The crude glucose is used in tremendous quantities to adulterate molasses. There is very little pure molasses in the market since Mr. Rockefeller got into the glucose business. Corn-juice is very much cheaper than cane-juice.

To refine glucose Mr. Rockefeller has it poured into big vats, whence it passes through a charred bone-dust and comes out as a colorless, sticky liquid like glycerine, which is growing more popular every day with bakers and confectioners. They buy it from Mr. Rockefeller in car-load lots, and use it for cheap candy and icings.

Mr. Rockefeller expects to make 1,000,000 tons of glucose next year, or the year after. Some of the distillers say if he keeps on at this rate there will soon be no corn for whiskey.

It seems strange that there can be found men who will try to make people believe that corn-juice as a food is equal to honey gathered by bees. Some time ago we called attention to a thick syrup that was being thrown on the market. Its advertisements told the people that it was "better than honey for less money." Just why any manufacturer should make such a claim as that, when it is not true at all, we can not understand. Any one who has ever tasted pure honey knows that no glucose concoction can ever take its place. It may deceive some people for awhile, but sooner or later they will realize the deception, and then the glucose product will be dropped.

We suppose that it is true that practically every good article in this world is counterfeited in some way or other. It is said that the very fact of a genuine article being counterfeited, is a testimonial in favor of the real article. However that may be, we think it behooves honey-producers everywhere to help along a National pure-food law, which will require the exact ingredients of every new article offered for sale, printed on the label, which label must be on every package

placed on the market. It is high time that the American people rise in their might and smite the base adulterators of pure-food products, and those who endeavor to palm off on an unsuspecting public their miserable compounds, which they claim are equal to the genuine article, if not better. There should be a National law which would prohibit the use of the word Honey on any other article but the genuine, as produced by the bees. This, of course, should be made general so as to apply to other articles of pure food. It is a burning shame that manufacturers are allowed thus to appropriate reputable names for their disreputable foods.

There is probably no other class whose interests can be so easily destroyed as that of the bee-keepers, when the name of their pure product can be misapplied and connected with some spurious article and put upon the market, as is being done at the present time by unscrupulous manufacturers.

It has been stated, and we believe truly, that there is no legitimate use for glucose. So far as we know, it never sells under its true name, but must ever be sold under the name of something that is pure and genuine, and that really has a value in the estimation of the public. We do not believe that the American people would purchase glucose in any appreciable quantity if they knew just what they were buying when the glucose is "worked off" on them.

The National Bee-Keepers' Association has a great work to do along this line. We hope that it may soon be in a position to "get busy" and look after these matters in a way that will not only be a credit to itself and bee-keepers everywhere, but will result in inestimable good to humanity. We all must eat. We want to know that we are eating pure food. The very best way, as we see it, is for the National Government to take up this matter and invite the co-operation of organizations like the National Bee-Keepers' Association, and thus compel those who put up and offer for sale food products to label them in a truthful manner.

Lessening the Cost of Hives.

The Rocky Mountain Bee Journal thinks there might be advantage in simplifying hive-construction. It thinks plain, cleated bottom-boards and plain telescope covers roofed with painted muslin are good enough, and that rabbets may be omitted in supers and scallops in bottoms of section-holders. A large number of bee-keepers would be in accord with this, if the saving of cost were sufficient, but there would be division of opinion if a vote were taken upon the motion to discard Hoffman frames for plain, thick top-bar frames. Many would agree in regarding "the Hoffman frame as little less than an abomination," while many others would consider it almost indispensable. But the extreme of condemnation is reserved for the short top-bar with the expense of spacing staples. Editor Morehouse will never get unanimity on that, for just as much as he condemns it others commend it, and would not do without it were the extra expense quadrupled.

Miscellaneous Items

Mr. H. C. Morehouse, of Boulder Co., Colo., writing us March 16, had this to say about the prospects for the coming season:

"You can mark Colorado crop prospects up a few notches. We are getting a tremendous snow-storm to-night and to-day, and the drouth is now broken. Our greatest storm-season (April) is yet to come, and with the start made to-day, I think water is assured. My bees have been gathering pollen since Feb. 22, and the weather is that of May rather than March."

Two Woodland Pictures have come to us through the kindness of Mr. W. Z. Hutchinson, who is making himself famous as an artist in the line of high-class photography. One of the pictures is called "Michigan's Last Pines," in which the trees stand out almost as though real, instead of a picture on a flat surface. Then, one can look away back into the dimly-lighted aisles, where only once in a while a straggling sunbeam finds its way. Mr. Hutchinson spent a day looking for this particular view, and waited for the sun to be in the right direction, away up in the northern part of the "Lower Peninsula," in Otsego County. He was told, and he thinks it is true, that this lot of pine is the last of Michigan's soft white-pine.

The other photograph is an autumn scene, in which are shown in

their natural beauty a grove of tall sugar-maples, with a depth of fallen leaves on the ground.

We suggested to Mr. Hutchinson that these two pictures should be used in one of the leading magazines, with a suitable descriptive article, and thus not only preserve them in a more permanent form, but also give them a wide circulation.

We wish here to thank Mr. Hutchinson for the two beautiful pictures.

Capt. J. E. Hetherington.—In an appreciative obituary notice in the British Bee Journal, written by the senior editor, Thos. Wm. Cowan, occurs the following:

"We had the pleasure of visiting Capt. Hetherington in 1887, and stayed some days with him. At that time he had 20 apiaries situated at distances of two or three miles apart, in a radius of 12 miles, so that the greatest distance he had to go from home was 12 miles. He and his brother managed the whole of these apiaries, having several men under them. We were there during the hours of business, which commenced at 5 o'clock in the morning, and saw all the working. The men went around from hive to hive, and took off super after super, which, in hives with three stories of sections, were promptly examined and removed, if necessary, and in this way 100 to 150 supers of sections were taken off and carried away."

Mr. E. E. Hasty, our "Afterthought"-er, when sending the last installment for his department, wrote us as follows:

FRIEND YORK:—

"When shall I hear de bees a-humming
All around de comb?"

Sometime. Ah, presumably, sometime.

E. E. HASTY.

Whereupon we at once replied to his question, thus, instead of referring it to Dr. Miller:

FRIEND HASTY:—Just wait, and a little later—

You shall "hear de bees a-humming,

All around de comb,"

When from de flowers de bees are coming,

To dere "Home, Sweet Home."

We didn't know whether our answer to his question was the correct one, but considered as an "afterthought" it might do, perhaps.

Convention Proceedings

Report of the Ontario Bee-Keepers' Convention Held in Trenton, Dec. 1, 2, and 3, 1903.

BY MORLEY PETTIT.

The Ontario Bee-Keepers' Association met in annual convention in the Town Hall at Trenton, Dec. 1, 2, and 3, 1903. After an opening prayer by Mr. J. K. Darling, Pres. W. A. Chrysler gave an address, as follows:

PRESIDENT CHRYSLER'S ADDRESS.

I am very much pleased to greet so many of our old and new members that have assembled here.

It might be well to remind ourselves that we are one year older than when we last met. "Time rolls its ceaseless course." The remembrances of past years picture varying degrees in the bee-keepers' enthusiasm.

While we have had, in times past, good crops and fair prices, there have been others where large quantities of honey never reached a profitable market.

While some parts of the Province have not been fortunate in obtaining a good crop this season, there is a surplus in others that is causing some anxiety on the part of the holders.

The same old subjects that we have been discussing in the past meetings are no doubt instructive to all of us in obtaining perfection in our pursuit, but I hope you will not allow them to become the all-absorbing subjects for debate. Let us not lose sight of the most vital subject at present, conducive to the greatest success and profitableness of our industry, which is the marketing and disposing of our honey in our own and distant markets.

The Honey Exchange Committee will present the report of their work during the past year, enumerating their difficulties and recommendations, and I sincerely hope you, one

and all, will give your individual interest, and express your views so something will result that will be the means of perfecting the plans already begun for the handling of all the honey that we as bee-keepers can produce.

When such a condition presents itself, there will be such an expansion in the production and exportation that will be as startling as has been in many of our other agricultural products.

Let us also profit, if it is at all possible, by our foreign exhibitions of honey, held in so many parts of the civilized world during the past few years. In all such exhibitions Canadian honey has taken no second place. It is therefore our just claim that Canada produces honey second to none in the whole wide world.

The Executive Committee have made arrangements to collect an excellent exhibit of honey from our members to be displayed conjointly with that of our Dominion Government exhibit of honey at St. Louis, in 1904.

According to the Ontario Government statistics we have in Ontario this year, 207,936 colonies of bees, being an increase over 1902 of about 5400 colonies.

The Inspector of Apiaries has, as far as I have been able to learn, attended to every call made for his services. The applications I have received for the inspector's services, I am sorry to say, have all been late in the season for him



W. A. CHRYSLER, President.

to map out his work to have it performed in the least time and expense. Although fast disappearing, I would urge every bee-keeper to give his best efforts to rid the Province of foul brood, and also to observe the law on the subject, especially that of Sec. 10, of the Foul Brood Act, which says:

"Every bee-keeper or other person who is aware of the existence of foul brood, either in his own apiary or elsewhere, shall immediately notify the President of the Ontario Bee-Keepers' Association, of the existence of such disease, and in default of so doing shall, on summary conviction before a justice of the peace, be liable to a fine of five dollars and costs." I think by a strict observance of the above, that foul brood in the Province will very soon be a thing of the past.

I hope you, one and all, will assist to make this one of the most interesting, pleasant and profitable of meetings. As many have come to this meeting from a distance, and at no small expense, it is very important that we employ our every moment in useful and profitable discussion.

As your President, I shall endeavor to judge without partiality upon every subject submitted for consideration, and that I may confidently rely on the members in supporting the dignity of the chair, and maintaining the decorum and orderly demeanor of the meeting.

W. A. CHRYSLER.

R. F. Holtermann—As foul brood has been touched on rather freely by the President in his address, it might mean by passing without comment, that we agree with all that

has been said. I might say that portions of this matter will come up in the order of business, and can be taken up there.

Mr. B. O. Lott read the following paper:

THE ADVANTAGES OF OUT-APIARIES—HOW, WHEN AND WHERE TO MOVE THEM.

In choosing this subject from among the many which we might probably discuss at this meeting, I made this choice, believing that, generally speaking, bee-keepers have had little experience with out-apiaries.

First, I shall reverse the order upon the program and ascertain if near your home apiary (I use the word "near," for I consider it very important for spring building), you have a good supply of willow, soft maple, alder, poplar, hard maple, honeysuckle, moosewood, wild plum, bilberry, and other spring flowers. If so, there will be no necessity to move early in spring. If not so fortunately situated, then select a locality along the lines I have mentioned, where there are also plenty of orchards, and, if possible, raspberries, clover and linden.

HOW TO PREPARE TO MOVE.

First, a hive for moving should not have iron or tin strips for top-bars to rest on, but should rest on wood, as the bees will propolize more quickly to wood than iron. Next, it will be necessary to have screens for the tops of the hives. These are made of 1½-inch strips, dovetailed at the ends, made exactly the size of the hive, with wire-screen cloth for covering. These can be fastened by four small wire nails to the top of the hive, then fasten the bottom-board with whatever fastening you may have. I prefer the Van Deusen clamp. Put on the entrance-sticks, and they are ready to move.

I might also add here the reason we prefer the clamps. Moving in July or August you can remove the bottom-board, and with a screen the same as the top screen, with screw nail on each side. Place the screen beneath the hive, with the screen-cloth next to the hive, fasten down the clamps, and they have ventilation at both top and bottom.

WHEN TO MOVE.

In the old settled part, such as Prince Edward and the southern parts of Hastings, Lennox, Addington, Northumberland, and Durham counties, linden is something of the past, while in the northern parts of the same counties linden is quite plentiful. Following the plans which I have already mapped out, with several railways running from south to north, and with good wagon-roads, it is a simple matter to move an apiary 50 or 60 miles without any loss whatever. We have learned also by experience that in placing hives in cars for shipment, always place them so that the frames hang lengthwise instead of crosswise, whereas shipping by wagons the reverse position is necessary.

We bee-keepers in Hastings ship our bees north for linden and clover, south to the county of Prince Edward for buckwheat honey, and home for winter quarters. By following this course we usually get a fair crop of clover, linden and buckwheat honey.

Time will not permit me to go into all the details of moving, but I trust enough has been shown to clear the way for any new or old bee-keepers situated in a locality where there is not an abundance of clover, basswood and buckwheat, and other honey-producing plants.

B. O. LOTT.

Mr. Holmes, who had been selected to open the discussion, began by saying he had not worked in out-apiaries, so could not offer any suggestions from experience. He thought it an advantage to have apiaries scattered so that a failure in one place would be compensated for by a good crop in another. He also considered it very important to have store-rooms as well as extracting-houses at all the yards, to avoid hauling home in the busy season.

A member asked Mr. Lott if he had a full outfit of machinery at each yard. He was also asked whether he found it possible to get locations where extra rainfall made the moving profitable.

Mr. Lott said that as he had no communication with the power which made the rain, he could not be sure on that point. He usually took the whole outfit when he moved a yard.

J. B. Hall—Will the gain in taking off the tin frame-rests counterbalance the trouble of handling the frames when they are glued fast, as they will be?

The majority of those who spoke agreed with Mr. Hall that it would not.

Mr. Post could see no advantage either way.

Mr. Holtermann remarked that it was best to hear from men of large experience on these subjects. He had found that with the metal rest and space above the frames the latter were liable to shift in moving; but with the space beneath the frames the rim of the queen-excluder, or the super or cover, as the case may be, would press on the ends of the top-bars in such a way as to hold them firmly in place. He had moved hives for miles on wagons, over all sorts of roads, without the full number of combs, yet they never stirred.

Mr. McEvoy—Would it pay to ship bees, say 200 miles, to get a better location?

Mr. Lott—Yes, if you could be sure beforehand that you would get a crop there and not at home.

Mr. Post—It is all luck and chance as to the profit in moving bees for pasture. I have moved bees 40 miles this year and last, and got nothing. Next year I might get six tons.

A member asked if it would be all right to move without fastening the frames if they are self-spacing, and have the bee-space on top.

Mr. Holtermann—It won't do if you have a proper self-spacing frame. You can't afford to use the Hoffman frame; but if you take a straight top-bar and drive two staples in each one at each end on opposite sides, letting them project a quarter inch, you have a self-spacing frame which has not the disadvantages of the Hoffman. I got this idea from Morley Pettit. Now have a bee-space below the frames, and the top-bars are held firm, and the frame can not swing.

Mr. Hall—If the hive is full of brood-combs fixed by burr-combs, there is not much danger of them stirring. It always pays to move bees to buckwheat. I can't agree at all with taking off metal frame-rests.

Mr. Lott said he was still satisfied with his plan in spite of the opposition of other good men.

Mr. Pettit—Just a word with reference to burr-combs. Of 205 colonies put away for winter in 12-frame hives, I feel safe in saying there are not 200 burr-combs. We have our top-bars the proper width, and not too deep, and properly spaced, and *we do not have burr-combs*—could not be bothered with them; prefer a staple-spacer. As to the staple interfering with the uncapping-knife, we hold the comb with the staple at the top and cut down from the staple. If you are in the habit of cutting upward, put the staple at the bottom, and you are cutting from it still. I have had long experience with loose-hanging frames, and then with staple-spaced frames, and I could not keep bees without the latter.

Mr. Armstrong preferred the Hoffman. He could handle three combs at once. Moving to buckwheat was very uncertain.

Mr. Pettit—As to spreading out on account of varying seasons, it's like this: Say this year you have a good crop here, and none 50 miles away. Next year it may be reversed. Now, if two yards are placed one here, the other there, you get a crop from this yard this year, and one from the other yard next. But suppose both yards are here—you have a crop from two yards this year, and no crop next. In either case you have the same amount of honey in two years, and in the latter case we saved the extra traveling expense.

Mr. Darling said he had never moved bees by train, but would recommend fastening the frames by two strips, one tacked on the frames at each end of the hive.

Mr. Byer—In moving bees you must always consider the chance of getting no honey when you get there.

Mr. Pettit—At conventions there is considerable arguing at cross purposes. Our systems vary, and to be really understood one must explain one's whole system, almost. Now the matter of fastening frames for moving resolves itself into two questions: Is your bee-space below the frames or above them? If below, the pressure of the super, excluder or cover, makes other fastening unnecessary, provided the frames are self-spacing. If the space is above the frames, the latter must be fastened by means of strips, or something of that sort.

R. Lowey—How would you prevent swarming at out-yards?

Mr. Sibbald did not see much advantage in cutting out queen-cells.

Mr. Hall—If they should decide to swarm at buckwheat, why, let them go.

Mr. Holtermann—I wouldn't like to get along without going through the brood-chamber once a week, but of course there is a difference in locality.

Where fruit-bloom is separated from clover by a period of no honey, then clover from basswood, and basswood from

buckwheat by the same, the swarming problem is very simplified. But with a continuous flow from beginning of clover on, what can we do? It is a lot of work to go through brood-chambers, but I do not know any way out of it.

Mr. Hall—We have the continuous flow, and must go over brood-chambers in the way described. If we find a cell with an egg, we take away all the brood.

Mr. Darling had never succeeded in preventing swarming by breaking down cells, except in the case of after-swarms, when it works well.

A member described a unique method of wintering bees, viz.: In cold-storage, where the temperature is kept uniformly at 37 to 40 degrees, Fahr.

(Continued next week.)

Contributed Articles

Bait-Sections and Their Profitable Use.

BY G. C. GREINER.

IT is a well-known fact that there is hardly a single feature connected with the management of bees, on which all bee-experts agree. The use of bait-sections is one of these features, and it may not be out of place to make a few remarks on this subject.

A writer from Texas says in one of our leading bee-papers: "I do not like bait-combs in the supers. The bees will finish these sections and stain them before the sections that had only foundation are finished."

I agree with the writer exactly, except that he places his argument on the wrong side of the fence. He does not say whether he uses them or not, but I should infer from the way he expresses himself later on, that he does not. The reason why he objects to bait-sections is just the reason why we bait-section advocates consider them so valuable. To be sure, bees will stain them (if we allow it), and that they begin to work in them long before they work on sections with foundation only, and that is exactly what we aim to accomplish by the use of bait-combs. As objectionable as stained sections may be, I am willing—and undoubtedly almost everybody else would be—to be troubled with them as long as they are an extra gift, and how many unstained sections are thrown in with this gift, on account of the induced earlier work in the supers by those bait-combs, we don't know.

But if these stained sections are so very objectionable, why not prevent them from getting so? I admit that sections with last year's drawn-comb will never look as nice and clear as those newly built in the height of the clover or basswood honey-flow, but if we use the comb-leveler thoroughly, so that the surface part of the comb is new work, their appearance will be greatly improved. And then, we need not let them remain where first placed until they are stained. A little time expended at this time is, I think, well invested. As soon as the colony has nicely started in these bait-sections, they should be moved to the other part of the super. If a row or two has been placed in the center, as I generally practice, they should be exchanged with some side-rows, bees and all. In this way all work in those already well under way is retarded, while the empty ones, or those with foundation, being moved to the place where the incoming bees have been accustomed to unload, are soon in prime working order. Managed like this, they are all finished nearer the same time, and no great harm is done by staining.

One main reason why some bee-keepers are not in favor of using bait-sections is, they are not particular enough to care for them properly. Unfinished sections that are intended to be used for bait-sections next spring, should not be left standing around, exposed to daylight, dust, flies, spiders, etc., and perhaps more or less honey left in until it is time to use them. When the honey harvest is over, and the supers are all gathered in, it is one of my first jobs to sort out the bait-sections for the next year. Anything from a drawn starter to a full-built comb is included in this class. Any sections that are capped about one-half or more are kept for home use (the table), but those with less capping are reserved for next year's baits. All the latter, and those combs that are

drawn out to full thickness, receive a comb-leveler treatment, after which they are again placed in supers and set out-doors to be cleaned out by the bees. To be on the safe side and excite the bees as little as possible, I always have an empty hive placed a little way from the apiary, on which I set these so-prepared supers, frequently a half-dozen at a time. The hive-entrance is reduced to nearly single-bee passage; this has a tendency to prevent the bees from gnawing and tearing down the combs, and the cleaning out is done in a more quiet way. I have never had any case of robbing caused by this procedure. As soon as the bees stop flying to this hive, the sections are all cleaned out and ready for storage.

When the honey-house, shop, or whatever place these sections are stored in is used as a work-shop during the winter, more or less dust is the natural consequence. To protect them and keep them as clean as possible, all supers containing them should be stacked up in snug, tight piles, and the top-ones covered up, the nearer dust-proof the better; and this holds good with all the empty supers, as well as with those that have been refilled with new sections.

In connection with the foregoing, the question may be asked: What part of the honey-crop is due to bait-sections? As it is impossible to use and not use bait-sections with any number of colonies at the same time, the question can not be answered even approximately. To test the matter in different seasons, or with different colonies—that is, use bait-sections one year and none the next, or set aside an equal number of in every respect equal colonies, with and without them—would not give reliable results, for we all know that all colonies under apparently the same condition will not always work alike. But one thing we are sure of: At the last gathering of our supers we have repeatedly found some, especially in seasons of light honey-flows, that had all their inserted bait-combs transformed into finished honey, while the rest that had only foundation starters large or small, had not been touched at all, and this can only be attributed to the use of bait-sections.

There is still another point, which I wish to mention: No matter how thorough and painstaking we have been in the spring management of our colonies, there are always some that are rather slow to take to their sections when the honey-flow begins. Knowing that it is the early start that counts at the end, I have many times induced these less ambitious colonies to make a start by exchanging their empty bait-sections with those already filled from more industrious ones. Like changing from the middle to the side rows, as spoken of above, it is desirable and necessary to move as many adhering bees as possible with the sections, and the less smoke we use the less our bees are excited, and the better we will succeed in this operation.

A drawing and description of my comb-leveler I will furnish later on. Niagara Co., N. Y.



"Keep More Bees"—Is this Doctrine the Correct One?

BY G. M. DOOLITTLE.

ON page 99, I find these words: "In place of spreading brood and stimulative feeding in spring to increase the number of bees, E. D. Townsend says in the Bee-Keepers' Review, that it is better to have a few more colonies and avoid the extra work. The point is worth considering."

That "the point is worth considering" is what leads me to say something on this matter, for I believe there is an element in it which the advocates of such a doctrine have not taken into consideration. This idea of Mr. Townsend is not entirely new, for I have noticed for some time that the idea was obtaining with some bee-keepers that more money is to be made from the apiary by keeping a large number of colonies and letting them largely take care of themselves, than there is by keeping a less number and properly caring for them.

Not long ago I received a letter from one of our apiarists, who said he that he was going to keep more bees than he had formerly kept, and do less work with them, for he believed that double the number of colonies would give him fully as much, if not more, honey than he had been getting, even if he did not manipulate them at all. He said that he believed the system of management used by many in securing large yields from individual colonies caused a greater amount of labor and manipulation than there was any use of, and henceforth he should adopt exactly the reverse from the plans he had formerly been using, and put

more bees into his field, so that he would get the same amount of surplus as before with very little labor. All that would be required would be the investing of a little more capital in shape of hives, etc., and that the "good management plan" would soon be a thing of the past. I have not given the exact words of the letter, but I have given the substance, very nearly, if not quite.

The reader will at once see the sentiment of this letter is nearly, if not quite, identical with that expressed in the quotation from Mr. Townsend at the beginning of this article. As these views come from persons of no mean degree in bee-keeping, it behooves us to consider the matter very carefully, as Editor York suggests, and if those of the past have been on the wrong track, to get over on the right one as soon as may be.

After carefully looking the matter over, and experimenting to quite a large extent for the past few years, I believe that there is one item at least, regarding these extra colonies, which the advocates of putting more colonies into the field forget, or one entirely ignorant of, the same being great enough more than to pay for the extra manipulation they seem so anxious to get around, so that the investing of capital in more hives for the extra number is worse than thrown away.

The item I allude to is that each of the extra colonies put in the field in order to secure the honey-secretion from a given area with but little or no manipulation, or to "avoid the extra work," as Mr. Townsend is quoted as saying, costs quite a large proportion of the product of our field; and if we carry the matter far enough along this direction of putting in a "few more colonies," it will cost us *all* of our product, except in the most favorable years.

Not long ago I saw a statement in print from quite a noted bee-keeper, that it took 200 pounds of honey to carry a colony of bees through a single year. This is a greater consumption of stores during the year than I had believed possible. My estimate has been that 100 pounds is sufficient for all the needs of any single colony during a year, and so to be on the conservative side I will call my estimate, or half of what the writer gave, as the amount needed to keep one colony of bees one year, as the right amount. Then the question which comes to us is this: Which is the cheaper, a little extra manipulation, or the extra colonies, hives, etc., and the *honey* that they consume?

Suppose that 100 colonies produce an average yield of 50 pounds each of surplus honey for their keeper, and by so doing secure all the nectar in a given field, year by year. This will make 5000 pounds of surplus as the apiarist's share of the field, while each of the 100 colonies will use 100 pounds each, or 10,000 pounds as a whole, as their share to carry them through the year. Thus we fail to secure to ourselves only a one-third share of the honey from our field, by employing an extra number of colonies.

On the other hand, if we employ the management or economy plan, which many of our best farmers do, and the plan adopted almost universally by our English friends—that of securing the same amount of produce off of *one* acre of land that many of our Americans do from three or four acres—we shall find our question stated thus: 15,000 pounds is the product of our field; 50 colonies are all that are needed with good management to secure this whole yield. Then 50 colonies must use 5000 pounds of this for their support, thus leaving 10,000 pounds for the manager. None but the most prejudiced can help seeing from this that the manager gets 5000 pounds of honey for his manipulation, and uses little if any more time than he would use on the 100 without manipulation; hence from the standpoint of overstocking a field, the *management plan* is 5,000 pounds ahead of the other plan of keeping an extra number of colonies, and proves that Mr. Townsend's doctrine is not correct.

And the same holds good, be the number kept great or small. A man can care for one-half the number of colonies on the management plan as *easily* (according to my way of thinking) as he can for double the number as proposed by my correspondent, and Mr. Townsend; and this one-half will give the apiarist better results in dollars and cents than will the whole cared for in the slipshod way that colonies are generally cared for when worked on the "let-alone" plan, and save the extra honey consumed by the extra one-half of the number of bees, as clean gain to the bee-keeper. *All* of the work done with the "larger number of colonies" is the *harder* part of bee-keeping, such as carrying the hives and colonies to and from the cellar, moving them to out-apiaries, etc.; while the manipulating part is of an easier nature.

Just compare sitting beside any colony and handling

the frames, as in spreading brood, to the heavy work of lugging hives full of honey to the cellar, or hauling the same from the out-yards, and you will catch a glimpse of what doubling the number of colonies, instead of manipulating one-half the number, means.

When viewed in this, the true light, Mr. Townsend's advice to "have a few more colonies and avoid the extra work" (Italics mine), sounds very strange, and as the Editor well says, "The point is worth considering." I hope the readers of the "Old Reliable" will consider it well before they leave a correct doctrine for one which can only prove incorrect.

And in conclusion allow me to say that the above is not mere fancy, but facts which the success of the two plans has proven in my hands, and which will be obvious to all who have closely watched the reports in our various bee-papers during the past. If any reader has any doubts along this line, let him try the two plans side by side till he or she is convinced. Make a careful test of the matter—one-half of each apiary by each plan. Don't make the mistake most do—that of running the whole apiary one year on one plan, and the whole thing the next year on the other plan; for the years vary so much that nothing definite can be arrived at in that way.

Onondaga Co., N. Y.

Our Bee-Keeping Sisters

Conducted by EMMA M. WILSON, Marengo, Ill.

Vaseline to Prevent Propolis on Fingers.

Mr. E. H. Beardsley writes: "Did Miss Wilson ever use vaseline on her hands when she scrapes sections? I tried it and liked it very much; also when putting foundation in sections my fingers get stuck with wax and bother me. I keep a bottle standing near and put a little on the ends of my fingers. It does not keep the gum off, but I think my hands do not get so sticky."

I usually scrape sections when the weather is quite cool, so I have not been bothered with propolis sticking very much. I have never tried the vaseline, but I should think it would help materially in keeping the hands free from the sticky stuff.

Management for Chunk Honey.

I have seen chunk comb honey mentioned lately, and would like to know how to manage from caring of the bees to putting it on the market. I would like to know what hive is best, what supers, frames and foundation to use, or any other particulars concerning it.

Humboldt Co., Iowa.

MRS. ADELLA PACKARD.

There is no special management needed to produce chunk honey. Just give your bees frames with starters. When filled you can cut the honey from the frames (leaving enough for a starter if you prefer). Now cut in pieces small enough for the receptacle you wish to pack it in, using either glass or tin. After packing in the pieces, fill up the empty space with extracted honey, and it is ready for market.

Doubtless a Case of Bee-Paralysis.

Please tell me something about the diseases bees are troubled with. I have one colony of Italians which were quite strong last November, and had plenty of honey, but they have gradually dwindled until there are only about a quart of solid bees left. They seem to be suffering from some kind of disease, for I find handfuls of them outside nearly dead, very much swollen, as if distended with honey, and so weak they can not crawl or fly, but trembling, and their wings have a quivering motion. I found some of them in that state clinging to the top of the frames and cloth, and down on the bottom-board. Yesterday, when going through them, I discovered their queen had died of the same disease.

Could you kindly suggest a remedy, and whether it would be wise to unite them with another colony, let them

die out, or give eggs and brood and let them rear another queen? I feel hopeless about them, for I don't know what to do. During the heavy rain the moisture from the hive caused mold to form on some of the frames and sides. Would that injure them?

MARTHA WHITE.

Los Angeles Co., Calif.

Pretty surely you have a case of bee-paralysis, a disease that causes no great anxiety in the North, but is sometimes a very serious matter in the warmer States. Many remedies have been offered, only to prove lacking upon further trial, but Mr. O. O. Poppleton, who is very good authority, says he has made a thorough test of sulphur and found it successful. He gives particulars for the treatment in the American Bee-Keeper, as follows:

I always go to the colony I am to treat during the day, and take away all the combs that contain brood; or, at least, unsealed brood or eggs, and give to some other colony; then, in the evening, as soon as the bees have quit work and are all home, I proceed to dust sulphur over every comb in the hive, and, if possible, on every bee in the hive. I never measure the exact amount of sulphur used, but suppose about a teaspoonful to every three or four combs in the hive.

I do the work by taking what sulphur I can hold between my thumb and first two fingers and dusting same over first one side and then the other of each comb, bees and all; also over any collection of bees there may be off the combs in any part of the hive. My aim is to have a thin dusting of the sulphur over every bee and every comb in the hive. The thinner the dusting the better, so it reaches everything in the hive. The next day, after doing this dusting, I carry back to the hives the same number of combs and brood as I had taken away.

The reason for taking away brood before dusting the combs, and returning again afterward, is because the dusting of combs not only kills all the unsealed brood in the combs, but ruins these same combs for brood-rearing.

For a week after dusting a diseased colony with sulphur, fully as many or more bees will be dying as before the dusting; and this fact may lead some to think the "cure" is not a cure. It will take a couple of weeks before one can tell whether the treated colony is cured or not.

A Sister's Experience With Swarming.

Please, may I come in and chat a few minutes? I want to sit by that new sister and learn some more about bees and bears. I will tell what a time I had with one swarm of bees last season. It was a swarm of Italians, and made me rather nervous, as I had never hived a swarm alone, but I was "in for it," as the men were not at home. So I donned my mask and gloves, got a pail of water, dripping pan and wing (as I use a turkey wing for a brush, and the pan to take them up in if needed); last but not least was the hive. So you see I did not forget that, if I was young and green at the business.

I set the hive as near as I could to them, shook them off, and succeeded in getting part of them in, but all left in a little while and went back to the old hive. Well, my feathers fell. It was a sorry dose for the first, but the next day was the same. The next day my husband helped me; he thought he had them sure, but not so, the contrary little things went back to the old home. Next day, promptly at 11 o'clock, they were, as usual, on parade almost to a minute, but we were at the swarming, moved the old hive and put another there, and hived, or tried to hive, them. They went back, but we had the laugh on them. We found the queen and put her in, and they stayed and stored a fine lot of honey. It was a fine swarm. I am sure experienced people will laugh, and say, "That is my experience." I think experience a good teacher, but sometimes a very hard lesson.

Lampasas Co., Tex.

MRS. MELLIE LOWE.

Bees Humming in the Cellar.

The question is asked by "Iowa," on page 10 (1903): "Do bees always keep on humming in the hives all winter when in the cellar?" Bees always hum when in the cellar 24 hours before a storm, and the more severe the storm the louder they hum.

Now, I would like to hear from some of the rest of the good bee-keepers on this subject.

Poweshiek Co., Iowa.

CATHERINE WAINWRIGHT.

Amerikanische Bienenzucht, by Hans Buschbauer, is a bee-keeper's handbook of 138 pages, which is just what our German friends will want. It is fully illustrated, and neatly bound in cloth. Price, postpaid, \$1.00; or with the American Bee Journal one year—both for \$1.75. Address all orders to this office.

Hasty's Afterthoughts

The "Old Reliable" seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B Rural, Toledo, Ohio.

EARLY OR LATE MARKETING—DOUBLE-TIER CASES.

One of the times when we want to put in a denial, only we fear it's perfectly true, is when W. L. Porter says the man who gets his crop all in late will get the minimum price. Well, how about the man who says, "Don't demoralize the market! Wait a little. Nothing gained by such awful rushing"—and is himself the most frantic rusher?

Surprised to hear Mr. Porter say that the double-tier case is coming more and more into favor again. Thought its coffin had been forever nailed by the paper tray and no-drip feature of the shallow case. Page 103.

INFERIOR SWEET CLOVER HONEY FROM UNRIPENESS.

W. D. Harris, page 108, seems to hit the mark when he intimates that the inferior quality sometimes charged against sweet clover honey is mainly because it is not allowed to ripen fully on the hive. His own sweet clover honey he calls good.

EGGS AND BROOD AT SWARMING-TIME.

E. J. Babb suggests that a colony which has sent out a heavy prime swarm often loses pretty much all its stock of eggs, and some of the young brood, because they are, from being so few in numbers, totally unable to feed so many brood as are left on their hands. Is this correct? I am inclined to think it is. It is a common opinion that such colonies are contrary about accepting queens or cells; and I think it's just this overwork at breeding that makes them so. Page 109.

ECONOMY IN FRAMES, ETC.

I see W. A. Moore makes his frames of lath, and his wire-embedders of superannuated clock-wheels. There is a style of man that would buy his breath already breathed than breathe it himself were it possible to do so. The above plainly shows that Mr. Moore is not that kind of man. Page 110.

IMPORTS AND EXPORTS OF BEE-PRODUCTS.

And what is there to afterthink about the exports and imports of honey and wax for the last two years? The United States is not apparently doing very much at either. Self-contained country as to bee-products. Official price of honey pretty low in 1902—33½ cents a gallon—less than 3 cents a pound. Improved in 1903 to 40 cents a gallon—still quite a bit below 4 cents a pound. The movements in honey for the two years nearly balance, 136 car-loads coming in and 143 car-loads going out—providing we call 20 tons a car-load. But of wax we are evidently importers, the exports being incidental. One train of 23 cars would bring in our two years' import of wax, of which we would keep 18 and send 5 out again. Page 115.

"LONG-IDEAL" HIVE AND THINGS.

And "long ideal" hive is the way we must "spake it" now! Whenever I meet that phrase something within me will up and say that there is something logically absurd and bad about it—worse than "long idea" hive which it displaced. How can any ideal be long, or have dimensions of any kind? Does it not compare pretty well with long perfection, long notional, long beauty, or long eureka, in getting together incongruous words and rubbing one's sense of propriety the wrong way? Page 115.

APPLICATION OF FORMALIN GAS.

Formalin gas fails to cure foul brood because the box used is too tight, eh? I don't exactly love to be impolite, but it seems to me Mr. J. E. Johnson is treating us to a sample of fine and well-ripened nonsense just this one time. Page 115.

A KINK IN QUEEN-REARING.

The Hewitt plan of defending minute larvæ against rough usage at the outset seems to me to be a valuable queen-breeder's kink. Transfer twice—first time using big fellows only intended to be thrown away. Not being a queen-breeder myself, I nevertheless venture to guess that the sooner the permanent inhabitant of the cell is put in

the better—only being sure that the bees themselves have actually accepted the cell and are putting royal jelly in it freely. Page 115.

THE "LEWIS NUMBER."

And so the G. B. Lewis Co. used 800 car-loads of lumber last year. Like a colony of bees we may be small individually, but in totality we are great. Most of us, if afflicted with manufacturing on the brain, would think of buying half a dozen trees, and getting a dozen wagon-loads of lumber sawed out—and then where would we be at? The pictures (in what might be called the Lewis Number) show plainly that that firm put up their factory for business—not wholly to make it what the Irishman said the Hoosac Tunnel was to be, an "ornymint" to society. Page 117.

ONE OF THE SISTERS.

How bloodthirsty of Sister Austin to wish her evening visitor dead! And yet some one would have us understand that all the sex (e'enymost) are waiting to "to bear and forbear"—well, with bears! Page 121.

Dr. Miller's Answers

Send Questions either to the office of the American Bee Journal, or to Dr. C. C. Miller, Marengo, Ill.

Feeding Sugar Syrup.

1. Will sugar syrup, after being a month in an extractor, covered with muslin cloth, harm the bees?
2. How will it keep the best, cooked or uncooked? INDIANA.

ANSWERS.—1. No.

2. Cooking makes no difference; sugar is thoroughly cooked in the making, and all that you do in making it into syrup is to unite water with it. The thing you probably have in mind as to its not keeping is its granulating, and it will very likely granulate if it stands a month. It will keep it from granulating if you add a level teaspoonful of tartaric acid for each 20 pounds of syrup, previously dissolving the acid in a little water. Still better, put in a pound of extracted honey for each 5 or 10 pounds of syrup.

Bee-Books—Buckwheat—Queen-Excluders.

1. Is there any better book than "A B C of Bee-Culture?" If so, what?
2. Is silverhull buckwheat any better than Japanese buckwheat? The former stays in bloom longer, so it is claimed.
3. Would it be all right to use a queen-excluder on the entrance to keep a new swarm from deserting its hive?
4. Will the bees build comb behind a follower if more than ¼ of an inch from the wall? ILLINOIS.

ANSWERS.—1. While there may be no better book, it may be a desirable thing to add to your knowledge by having such books as Langstroth and Cook.

2. There is probably no advantage in any other direction. It is certain that silverhull stays in bloom longer?
3. Yes, unless it should be an after-swarm with a virgin queen, in which case it would not do to keep the queen in too long, lest she might not be fertilized.
4. Not unless badly crowded for room, and then not unless a good deal more than ¼.

Possibly Laying Worker—Getting Increase.

1. Last fall I had 4 colonies of black bees in Langstroth hives (8 Hoffman frames). Hive No. 4, however, had only 5 frames filled, it being a late swarm, but as they seemed to have plenty of stores I thought they would winter all right. In the latter part of December I purchased 6 colonies of black bees in old-fashioned box-hives, or "gums," intending to transfer them in the spring. On Jan. 9 I noticed great excitement in front of box-hive "F," bees fighting, and lots of dead bees in front; all other colonies seemed quiet. I closed the entrances to all the hives and soon the trouble seemed over. I took it for granted that "F" was attacked by robbers, and by closing the entrance of course stopped it. On looking over my hives on Jan. 15, however, I discovered hive No. 4 (the one with only 5 frames) to have died out; about 20 or 30 dead bees lying on the bottom-board, the rest all gone; still, each of the 5 frames had a strip of sealed honey 2 or 3 inches wide next to the top-bar. Is it likely they left their hive and tried to unite with box-hive "F" on the 9th, and were killed in the attempt? and what should have induced them to do so?

2. I gave the 5 frames with what honey there was in them to colony No. 3. Feb. 13 I was surprised to see some drones flying in front of hive 1. I opened the hive and found abundant stores, and in 2 frames

a patch of drone-brood as big as the palm of my hand, but not a sign of worker-brood. I mentioned this to a bee-keeping friend, and he warned me to be on the lookout for a laying worker. On Feb. 24 I again examined this hive, and found the drone-brood nearly all hatched, but no more young brood coming on, and still no sign of worker-brood. Acting on my friend's suggestion, I began to look for the queen, but could not find her. To make sure, I removed the hive and set a new hive with new frames of drawn comb and some stores in its place, and put an Alley drone-trap on the entrance; now I shook all the bees off the frames in front of the new hive; they went in, leaving 20 or 30 drones outside and no queen, which proved the theory of a laying worker to be correct. I put a cover on hive No. 1, with a hole 10 inches square cut in the center, and over this hole I tacked a piece of mosquito-netting, and then set one of the box-hives over this hole and closed the entrances of both hives with netting. I intend leaving them that way 48 hours, after which I will take the netting away and let them unite. Do you think they will be all right? If not, what will I do to get rid of this laying worker?

3. This leaves me with practically 8 colonies, counting hive No. 1 and the box-hive on top as one. I want to increase as much as I can with safety, and would like to have 20 colonies by next fall. Please tell me how to proceed. I intend Italianizing this spring.

Feb. 25 I noticed bees coming in with pollen. ALABAMA.

ANSWERS.—1. Yes, the probability is that your suggestion is correct. It is not certain just why the bees of No. 4 should have deserted their hive; but I have known colonies to leave in the same way from what appeared to be sheer excitement at a time when having their first flight after long confinement.

2. Pardon me if I say that I don't believe that there is satisfactory proof that your theory of a laying worker is correct, if you mean by that that only one laying worker was present, for the probability is that a large number of workers were laying.

Quite likely the uniting will be satisfactory, but you might make it a little safer if, instead of having the hole between the two hives entirely open, you would put paper between the two hives, tearing a hole in the paper large enough for a single bee to pass through, and leaving to the bees the job of tearing away the paper to make the passage large.

3. It is hard to tell just exactly what would be your best plan of increase. Much depends upon circumstances. One way would be the nucleus plan. See reply to "Illinois," page 170. Possibly natural swarming might suit you better. If each colony should send out a prime swarm, and half of them a second swarm, that would increase the 8 to 20. You would be very likely to get at least that increase if you should hive the prime swarms on new stands, leaving the mother colonies in their old places.

Wholesomeness of Honey from Foul-Broody Hive.

Is honey eatable, taken from a hive that had foul brood in it, when the combs are lightly affected? I mean extracted honey.

MAINE.

ANSWER.—The bacteria that are so deadly to the larvae do not injure the human stomach.

What of Bee-Keeping in Oregon?

Is Oregon a good bee-State? How does it compare with other States as a field for apiculture? Also, what are the principal sources of honey in Oregon?

OREGON.

ANSWER.—I must confess ignorance, and it may be that some Oregon bee-keeper will answer your questions. Very little, certainly, has been said about Oregon as a honey-State, and that looks as if it were not remarkably good in that direction.

What Caused the Loss—Feeding Old Honey—Alfalfa—Transferring.

1. I am a boy 19 years old. I just started last fall with 15 colonies. During the winter 3 colonies have died. When I examined them I found only about a double handful of bees, the others being chewed up by something. In one of the hives the bees were chewed up, and some were carried out under the hive. The comb was not chewed or destroyed a particle, and there was enough honey to have wintered them, so they did not starve. Now I would like to know what killed them. Was it moths, or mice? If moths, how would you prevent their from destroying them?

2. I have some old comb honey I want to feed to the bees. Would you advise me to feed it to them now? If not, when?

3. I want to make some beeswax. How can I make it? Should all the honey be out of the comb before making the wax?

4. I want to sow some alfalfa for my bees. When should it be sown? and how to prepare the ground?

5. I have some bees I want to put into new hives. What time must I transfer them?

6. What time should bees be placed on their summer stands?

ILLINOIS.

ANSWERS.—1. The moths had nothing to do with it; they take warm weather for their work; and I don't know what it was unless mice; if it was mice it's strange they should leave the honey and combs undisturbed.

2. Unless some are in danger of being short of stores so that feeding should not be delayed, don't feed till bees are flying daily.

3. Honey will do no harm, only it will be a loss of the honey. If there is enough honey to make it worth while, put the combs in a stone crock or something of the kind and heat slowly just enough so that the wax and honey will be melted. Then let cool and pour out the honey.

If the combs are very old, you cannot get the wax out clean without something in the way of a wax-press. If you have nothing of that kind, and no solar extractor, you can do very well with a dripping-pan extractor described in "Forty Years Among the Bees," page 307. "An old dripping-pan (a new one would do) has one corner split open, and that makes the extractor. The dripping-pan is put into the oven of a cook-stove with the split corner projecting outward. The opposite corner, the one farthest in the oven, is slightly raised by having a pebble or something of the kind under it, so that the melted wax will run outward. A dish set under catches the dripping wax, making the outfit complete."

4. Prepare ground and sow the same as other clover or grass seed. For the best success the ground should be inoculated with some of the soil containing alfalfa bacteria (which you can obtain from the Illinois Experiment Station, Urbana, Ill.), although it is perhaps as well to use ground on which sweet clover has grown well.

5. In time of fruit-bloom, or perhaps better wait till the bees swarm, and then transfer three weeks after swarming.

6. If in the cellar, not until soft maples are in bloom, and not till the weather seems somewhat settled; if packed outdoors, they must be moved before they fly enough to have the location well marked, say as soon as they fly about once a week.

Bees Storing Honey in Glass Jars.

Have bees ever been induced to deposit comb honey, of their own free-will, in glass honey-jars? If not, why not? CALIFORNIA.

ANSWER.—Yes, indeed; lots of times.

Red Clover Queens.

Does the red clover queen-bees work on red clover? What I mean is, do they gather a good deal of honey from red clover? Have they been seen to work on the plant? CALIFORNIA.

ANSWER.—As a rule the tubes of red clover blossoms are too deep to be penetrated by hive-bees, and yet either because the tubes are shorter than usual, or because they are unusually full of nectar, there have been many cases in which Italian workers, and even blacks, have been seen to work upon red clover, and in some cases important amounts of honey gathered from that source have been reported. Some bees are especially distinguished as workers on red clover, and the queens of such bees are denominated "red clover queens."

Feeding Colonies in Box-Hives—Enlarging the Apiary.

1. I have a few colonies in box-hives, which are not very strong and I think they need feeding. I have no feeder, and some one told me to make a little trough, fill with honey, and shove it in at the entrance. Would this be all right? These bees are in the cellar, and I do not like to disturb them at the top.

2. This is in northeastern Iowa, and the principal honey crop is white clover, which lasts throughout June and July. Will this give honey-flow enough to make bees profitable? There are no bee-keepers near here, and I am trying to get all the advice I can. I have but 3 colonies. Would you advise my purchasing more? IOWA.

ANSWERS.—1. Yes, only in some cases the bees will not come down. If you have some way to warm the cellar for the special occasion it will help, or you may get them down by blowing in the entrance.

2. Yes, bees may be quite profitable with white clover alone as a surplus crop.

Criss-Cross Combs in Brood-Chamber—Burr-Combs.

1. I have purchased two 10-frame hives, chock-full of comb and bees. I tried to look for the queen, but the vertically wired frames were all built in a solid mass, and it is impossible to get one frame out without breaking a piece from one next to it. I pried off two frames and broke a piece of the third frame. The comb was running through both frames. I like to get control of the bees and clip the queen's wings. What would you advise me to do in this case? Let them swarm naturally? or put supers on? Plum, pear and peach trees are in bloom. Would it be advisable to cut out the crooked combs or change the frames?

2. How can I prevent burr-combs?

FLORIDA.

ANSWERS.—1. Put supers on as soon as needed, then let the bees swarm, and 21 days after swarming you will find a good time to straighten the combs, there being no worker-brood in the way. If the bottom is not immovably fastened to the hive, turn the hive upside down, and with a long-bladed knife or a saw separate the combs from the sides of the hive, and then lift off the hive from the combs. That gives you a fair chance to see what you are doing, and from what you say about the combs it is likely that you can with a little cutting get every comb by itself, pressing the comb into the frame and tying a string around it, then putting it in the hive. A little care will brush the bees out of the way, and after you get one comb back in the hive

you can brush into the hive the bees from each comb as fast as you take it out.

2. You cannot prevent burr-combs entirely, but you will get along with a minimum if you will avoid too large spaces wherever burr-combs are likely to be built—don't have spaces more than $\frac{1}{4}$ inch.

Feeding Unfinished Sections—Black vs. Italians—Transferring.

1. I have lots of unfinished sections left over from last year. Should my bees get short of stores how would it do to put a super of unfinished sections on each hive?

2. Should the sections be left on when the honey-flow begins, or will the bees darken them so that they will be unsalable?

3. Do black bees winter better, enter supers more readily, and live longer than Italian bees?

4. I want to transfer some bees during fruit-bloom. Can I get queens at that time?

VIRGINIA.

ANSWERS.—1. It will do well.

2. Although they might not darken them very much, it will be better to take them off as soon as emptied. But it is well to remember that many think it is not a good thing to use sections that have been kept over winter with honey in them, said honey having candied.

3. I don't know that there have been any exhaustive experiments that would afford a positive answer to your question.

4. You may do so by sending South.

Keeping Bees from Swarming.

I have 5 colonies of Italian bees, 5 blacks, and 4 hybrids. I want to keep the hybrids from swarming. Please give the best plan.

VIRGINIA.

ANSWER.—Here's one way. As soon as time for swarming, take from hybrids all but one brood and give to Italians. That will prevent swarming of hybrids, and hurry up the swarming of the Italians. When the first Italian swarms, hive the swarm on the old stand, and put the mother colony on the stand of the strongest black, removing the black to a new stand. Do this with each of the Italian swarms in succession. Each of the Italians will almost surely send out a second swarm, and these second swarms can be strengthened with brood from the blacks. That gives you 15 Italians, and if you want to Italianize the blacks you can start nuclei from them and give cells from the Italians that have swarmed.

Moles or Mice Dead at Hive-Entrance—Stores Used in Winter.

1. Feb. 2 being warm, I took the guards from my hives to allow the bees to clean their hives. Feb. 3 was still warm, and I left them off at night. The next day was very cold and stormy, and I put them back. About Feb. 8 came a warm day; the 9th or 10th I happened to be passing and noticed 4 dead moles, about the size of house-mice, in a guard, with a few dead bees in their fur. What killed them?

2. I did not have room in my bee-house for one colony, so I left them out, wrapped in tarred paper, solid all around, top and bottom, open at the front. Now, in examining my bees the other day, those

in tarred paper did not use half, and I should say not a quarter as much honey as the others. I looked at 6 last week; one had lots of sealed brood and the rest none, so far as I could see. The one in tarred paper had none.

MISSOURI.

ANSWERS.—1. The bees probably stung them to death; but I wonder whether they were not short-tailed field-mice instead of moles.

2. One swallow doesn't make a summer, and it is possible that it just happened that the one hive in the tarred paper did the best for some other reason. It is quite possible, however, that the difference was owing to the tarred paper. It will be well worth while to try the thing on a larger scale next winter, and, if you do, please be sure to report, whether the result be favorable or unfavorable.

Thanks for your kind invitation.

Transferring from Box-Hives—Sorghum Molasses for Stimulative Feeding.

1. I have some bees in box-hives, and I wish to transfer them into good hives this spring. What time would you consider the best for doing it? Is there any danger of robber-bees then?

2. Would it be wise to feed sorghum molasses to stimulate brood-rearing? If so, what method of feeding would you use? Would there be any objection to feeding in a vessel that all would have access to? I am working for comb honey.

ILLINOIS.

ANSWERS.—1. Wait till the bees swarm, and transfer three weeks after the time of swarming. At that time there will be no brood in the way, unless it be a little drone-brood. The danger from robber-bees at that time is not likely to be great.

2. Yes, if there are not enough bees all about you so that you would have to feed all your neighbors' bees, you can feed right out in the open, which is really more like gathering from the fields than when you feed in the hive. But if there is plenty of honey in the hives, you may not do as much good by feeding as you expect.

Put-Up Plan for Swarming—Hive-Ventilation.

I hope to try some of the plans you give in your book. With regard to the "put-up plan," page 183—

1. Would it not answer to put up the queen as soon as queen cells with larvae in them were seen, instead of waiting and watching for swarms?

2. When you put down the queen again is there no danger of her being balled?

3. In the "foundation treatment" plan, page 186, will it not be necessary to destroy queen-cells also at the end of the week or 10 days when the old hive is put back on the stand again?

4. Do you think the ventilation you speak of, page 191, would be necessary here where the summers, particularly at night, are cool, not over 85 degrees for a top figure, and not often so high as that?

BRITISH COLUMBIA.

ANSWERS.—1. Yes, it works well, although I have not had as much experience with that plan as with waiting for the bees to swarm.

2. I do not recall that she was ever balled, to my knowledge.

3. It is safer to do so, and the man that wrote the book ought to have known enough to say so.

4. Try it for extracted honey, and I don't believe you'll find too much ventilation. It isn't often here that we have nights above 85 degrees.

Texas Queens.



3 and 5 banded Goldens from a reliable breeder. You all know him—DANIEL WURTH—the Queen Specialist—who fills orders by Return Mail. I am here to stay, and thank my many friends and patrons for their liberal patronage in the past. Wishing you all a Happy New Year, I am ready as usual to furnish you with the best of Queens. Tested, in March and April, \$1.25 each; Untested, in April and May, \$1.00 each; 6 for \$5.00. Breeders, yellow all over, \$3.00 each. I am booking orders for early delivery.

DANIEL WURTH, Karnes City, Tex.

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Fine Weather for Bees.

We are having fine bee-weather here. Until the last of December we had no snow whatever, but from that time up to the middle of February it snowed frequently. We are now having warm, thawing weather.

GEORGE S. GRAFFAM.

Penobscot Co., Maine, Feb. 23.

Think the Bees are All Right.

Although it was very wet the first part of the season of 1903, we never had so long a flow from white clover before. From 75 colonies, spring count, I got 4000 pounds of section honey, mostly white clover, and increased to 180 colonies, which number was reduced to 150 through robbing.

We practice cellar-wintering here, very successfully. Although the thermometer ranged from 30 to 45 degrees below zero all winter, yet I think most of my bees are coming through all right; they are, however, beginning to get a little uneasy.

My father has kept bees for the last 30 years,

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and a number of years ago he was a subscriber to the American Bee Journal, but I never took much interest in bees until last summer, when they were all left on my hands. I at once hunted out one of the old Journals and sent \$1.00 for my subscription, and then it was that my eyes were opened to the magnitude of bee-keeping.

My bees are all in old-fashioned hives with stationary frames, hives 13 $\frac{1}{2}$ x 15 and frames 10 $\frac{1}{2}$ inches deep. They are, of course, very inconvenient, and I shall hereafter put all my increase into new Langstroth-Simplicity hives and frames, and transfers the balance into the same next fall.

I enjoy the Journal very much, and hope it will continue to send forth the good things.

H. E. BABCOCK.

Monroe Co., Wis., March 6.

Long Winter Confinement.

The winter has been long, and I think there will be great loss in bees this winter, especially among those wintered out-of-doors. The bees have had but one flight since Nov. 15.

Adams Co., Ill., Feb. 26. S. N. BLACK.

Carrying in Pollen.

The record is "broken all to bits." What do you think, Feb. 28, and the bees just falling over one another carrying in pollen? That will about do, won't it? J. T. RENO, JR.

Cedar Co., Mo., Feb. 25.

Bees in Fine Condition.

Bees are in fine condition; I never saw them in better shape at this time of the year since I have been in the business.

W. S. FEEBACK.

Nicholas Co., Ky., March 1.

Association and Individual Honey Dealers.

We would like to say a few words with reference to Mr. Drexel's article read before the Colorado Bee-Keepers' Association. We are not opposed to commercial associations of bee-keepers; we were merely pleased to note that one bee-paper had courage enough to speak of what we all have seen, viz.: That such associations are organized to make money, and should pay for advertising, the same as individuals. We do not want to be misunderstood as being opposed to their making money, either. Individual buyers must make money, so also associations. The article mentioned stated that the producers on his side of the range got a better price for their honey in 1902 than the Association at Denver realized for their members. That was the case in the Arkansas Valley, also, if we are correctly informed. It is apparent, then, that individual association buyers break even for the seasons mentioned. It will be so on to the end of the chapter, with the chances somewhat in favor of the individual buyers paying the best prices. Why? Because they have their own interest at stake, and have to consult with nobody before acting.

For instance, an Eastern buyer came along here early last August and bought a car from us at a price 25 percent above what it proved to be worth at the time of delivery—Oct. 15. He was not posted on the large general crop, and we were. We tried to sell him several cars, hoping thereby to benefit our customers by taking that risk on our judgment, but did not succeed in that. Individual buyers often buy on their judgment, which is offered as an explanation of their sometimes paying more.

But these are small matters, and should be so well understood that such criticisms would not be written against us as a class, as a portion of the article mentioned was. Honey-producers need the individual buyers just in proportion that the individual buyers need them. Our interest lies mainly in producing honey. We buy as a side-issue. We feel that as such we must deeply regret the elimination of anybody who bought honey.

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country. The importance of this is not emphasized as it should be. Next to advertising honey, this is the most important work that the National could engage in.

We are anxious to see the National take up the systematic advertising of honey; not because as was intimated by the Editor in his foot-note to our article, Dec. 1, but because we produce honey for a living. A moment's reflection will make it apparent that in buying we pay a price that we know we can sell on the markets as they are, at a profit. Anything done to improve the markets will benefit the producer, and him only, and exclusively, in the end.

To return to the article again. Mr. D. has not stated the matter fairly. He leaves the readers to believe that he had a car-load of honey, when as a matter of fact he had but half a car. That was a season, also, that prices made a rapid advance from opening figures. If there had been a car of the goods mentioned, it would have been taken at 10 and 11 cents, by the cash buyers, readily.

We trust that the Editor will let us add this closing remark at the risk of some free advertising. Our customers have received as much for their honey and procured their supplies as cheaply as any association in Colorado or elsewhere.

THOS. C. STANLEY & SON.

Otero Co., Colo., March 11.

Some Experience With Bees.

When I was a boy my father was a bee-keeper to quite an extent, keeping as high as 50 colonies sometimes, in which I was somewhat interested, but they were kept in the old-fashioned hives, which did not pay so very well, owing to the heavy winter losses, and when the winter of 1882 came we lost all—some 40 colonies.

I did not have another colony until 1901, (3 years ago); 21 years of grace, and during that time lots of things had happened. I sold the farm that we lived on in Foad du Lac Co., and moved to Wood Co., Wis., where I now live. I have a farm here where I keep my bees and 40 head of cattle.

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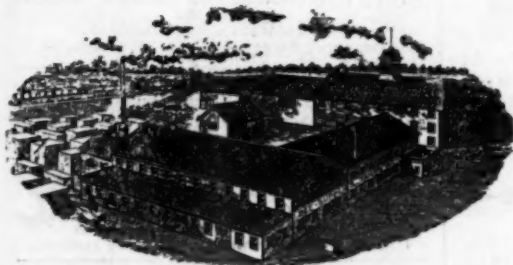
new one; and, also, the new subscriber must not be a member of the same family where the Bee Journal is already being taken.

We think we have made the foregoing sufficiently plain so that no error need be made. Our Premium Queens are too valuable to throw away—they must be earned in a legitimate way. They are worth working for.

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was a good one. It cast a good swarm and stored 75 pounds of honey. I became interested in them and bought 2 more colonies, and then began hunting bees in the woods. I found 5 trees, and saved all of the bees, and got 700 pounds of honey. I put the bees into the cellar, and 2 colonies died, so I had 7 colonies, spring count. I increased to 29 colonies and had 700 pounds of honey. I put the 29 colonies into the cellar and came out with the same number in the spring of 1903.

I began to take the "Old Reliable," and got "A B C of Bee-Culture," also Doolittle's "Scientific Queen-Rearing," and began to study, and found lots to learn.

My 29 colonies did not do so well, owing to the bad weather we had the last of July and the first of August, but I sold 2300 pounds of comb honey, and increased to 65 colonies, which are wintering in fine shape so far. I put them in winter quarters Nov. 14, and will leave them there until April 1, or later, as the weather permits.

I have just completed 65 hives and supers. The cellar my bees are in holds the temperature from 40 to 45 degrees, and is dry enough to live in. I will report later how the bees come out.

I took first premium on comb honey at the Marshfield Fair, and got a diploma in blue (on Wood Co. exhibits) at the Milwaukee Fair.

FRED E. GRAHAM.

Wood Co., Wis., March 7.

Feeding Bees in Winter, Etc.

Last year was my first with bees. I have 10 colonies on the summer stands. I made outside cases and packed with chaff; they are all living at present, but I am afraid they may be short of honey. Can I make a syrup in pans and place it 30 or 40 feet from the hives and let the bees get it with safety, or is it likely to cause robbing? I do not want to unpack them, and I cannot feed them inside of the hive without it. A great many bees in this neighborhood have died this winter. My bees have been on the wing but twice since Nov. 17.

I am very well pleased with the American Bee Journal. My folks think I have gone daft on the bee-question. Bee-pasturage is poor here, the farmers all keeping sheep, and they keep the white clover eaten out.

Why does not some man produce a red clover that bees could work on? I think it could be done.
H. S. SPENCE.

Harrison Co., Ohio, Feb. 23.

[It would hardly do to feed in the way suggested. In cold weather the best way is to feed sugar-cakes, directly over the bees, as we have described several times the past few months in these columns.—EDITOR.]

Good Advice to Beginners.

I noticed from time to time reports of the success or failure of beginners in bee-culture, and as I am a beginner, and a pretty green one, I'll give my experience for the past season.

I had 2 colonies in the spring, which I had wintered, and which were in very good shape when I took them out of winter quarters. June 3 one of the colonies swarmed, and the next day the other one cast a swarm. Well, somehow, these 2 swarms gave me a very bad case of bee-fever. I got 6 colonies from these 2 colonies, and I bought 8 more swarms from another bee-keeper.

Now right here I wish to advise beginners never to start with too many colonies until thoroughly acquainted with the business. These last colonies I bought were either second or third swarms, and 4 of them proved to be queenless when I got them home. But I re-queened them by putting in a frame of brood from other colonies. Of course, I wished to build my own hive, and unfortunately I took the advice of a competent (?) neighbor bee-keeper, and made my hives like those he had invented for his own use. Another thing, I used the machine belonging to this man for putting foundation into sections. I got about 200 sections filled with foundation when I found to my disgust that the foundation was fastened about 1/4 inch from the center. Of

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AUGUST WEISS, Greenville, Wis.

course I found out the result in sections that I took off the hive.

The honey season was short here last season, and I now believe I should not have taken any honey away from my late swarms. But, as before, I took bad advice, robbed my bees, and what is the result? I now find I have only 2 poor, weak colonies alive.

Another thing I wish to say about my hives: I have read a great deal this winter, and I made up my mind that I would keep bees in 8-frame Langstroth hives next season. Of course, I have about 20 of those other goods boxes on hand, and any one who takes a fancy to them can have them at a reduced rate. I may just say my neighbor adviser, upon seeing my Langstroth hives when completed, decided to do away with his "own get up," and use the Langstroth. He has been in the bee-business 30 years. Now I do not want you to think I put all the blame on the man who gave me advice. I blame myself for not reading up before going into apiculture, instead of reading up after I lost my bees. My advice to beginners is: Get acquainted with your work before you get too far into it.

I will just say, in conclusion, that when I am in need of advice I will consult my bee-books or the back numbers of the American Bee Journal.

I hope my experience will be a help to some beginner. HARVEY SMITH.

Ontario, Canada, March 2.

CONVENTION NOTICES.

Connecticut.—The Connecticut Bee-Keepers' Association hold their spring meeting in the Capitol at Hartford, April 23, 1904, beginning at 10 a.m. All bee-keepers and their friends are cordially invited to attend. A question-box will be opened, and several interesting essays presented. E. E. SMITH, Cor. Sec.

Watertown, Wis.

Utah.—The spring convention of the Utah Bee-Keepers' Association will be held April 5, at 10 a.m. and 4:30 p.m. Among other important questions to be considered will be the World's Fair, our State Fair, and the Portland Fair of 1905. We also desire to formulate some plan, if possible, to further increase the fraternal interest for the mutual benefit of our bee-keepers. We cordially invite all bee-keepers to be present. We also invite them without delay to send in their views on these and other topics. The convention will be held in the City and County building, in Salt Lake City. E. S. LOVESY, Pres.

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MARKET QUOTATIONS

CHICAGO, March 8.—It is difficult to get more than 12c per pound for any lot of white comb honey, with sales chiefly at 11c; even at this price it does not work off as fast as owners wish it would. Selections in the most desirable grades bring a little higher price in small quantities; off grades sell at 10½c per pound less. Extracted honey plentiful and slow of sale; white brings 6½c; amber, 5½c, according to quality and style of package. Beeswax active at 30c. R. A. BURNETT & Co.

CINCINNATI, March 19.—The honey market continues to be dull, and if anything the prices on comb honey are lower; concessions are made on bigger lots. I quote: fancy white comb from 12½@14c. Sales on extracted are made at the following prices: Amber, in barrels, 5½@5¾c; in cans, ¾c more; alfalfa, water-white, 6½@¾c; strictly white clover, for extra fancy, 7½@8c. Beeswax, 30c. C. H. W. WEBER.

PHILADELPHIA, March 21.—The season for selling honey has been prolonged on account of the cold weather, which has certainly been very fortunate for the bee-keeper, as there never was as much honey shipped in so late in the season to be disposed of. It has broken the price quite considerable, but there is still quite a demand, which otherwise would have fallen off. We quote: Fancy white comb, 13@14c; No. 1, 12c; amber and buckwheat, 9@10c. Extracted, white, 7@8c; amber, 6@7c. Beeswax in good demand, 31c. We are producers of honey and do not handle on commission. WM. A. SELSER.

CINCINNATI, Mar. 4.—The demand for honey is brighter than it has been in the past 60 days. We continue to offer amber extracted in barrels at 5½@6½c, according to quality. White clover extracted is a drag on the market at 6½@8½c in barrels and cans. Comb honey seems to be reviving at 13½@15c for fancy. Beeswax, 30c. THE FRED W. MUTH CO.

ALBANY, N. Y., Mar. 25.—Honey market dull and getting late; demand falling off for comb honey now. So much comb honey is out of condition, being candied hard in the combs makes most unsalable. We quote: 8@12c; nominal now. Extracted, white, 6½@7c; amber, 6@6½c; buckwheat, 5½@5¾c. Beeswax, 28@30c. H. R. WRIGHT.

BOSTON, March 22.—There is nothing new to note, either regarding the condition of our honey market or prices. The demand is naturally not so heavy as it was, owing to the warmer weather and the near approach of the maple sugar season. Prices remain same as before, which are as follows: White in glass-front cases at 16c; No. 1, at 15c. Supply is ample, and demand light at this time. Extracted, water-white, 8c; light amber, 7@8c; with but little call for dark Florida.

BLAKE, SCOTT & LEE.

KANSAS CITY, March 22.—The demand for honey, contrary to the usual market conditions at this time of the year, is slow, and only very low prices will induce the trade to buy in large quantities. Fancy comb honey is selling at \$2.25; No. 1, from \$2.00 to \$2.15; amber honey and combs that are not well filled are selling at just what prices the trade will pay. Extracted honey is moving very slowly; there is very little demand for amber, and white is selling at 6@6½c. No demand for barreled honey.

C. C. CLEMONS & Co.

NEW YORK, March 7.—The market on comb honey is decidedly dull. There is some demand for white honey, but prices are ruling rather low. We quote fancy at 13@14c; No. 1, at 12c; amber, at 11c, and in round lots even these prices have to be shaded in order to effect sales. There is no demand at all for dark and buckwheat comb honey, and it looks as if some of it would have to be carried over. We quote nominally at 9@10c per pound.

There is a fair demand for extracted honey, at irregular prices, fancy white bringing 6½@7c; light amber, 5½@6c; other grades, 5@5½c; and Southern, common to fair, 50@55c per gallon. Beeswax firm at from 29@30c.

HILDRETH & SEIGELKEN.

SAN FRANCISCO, March 16.—White comb, 1-lb. frames, 11½@12c; amber, 8@10c. Extracted, white, 5½@5¾c; light amber, 4½@4¾c; amber, 3½@4¾c; dark amber, 3¼@3¾c. Beeswax, good to choice, light, 27½@29c; dark, 25@26c.

Market is very quiet. Offerings are of fairly liberal proportions for this late date in the season. Quotations remain about as previously noted, but the extreme figures quoted are based mainly on the views of holders.

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